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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/430,877	11/01/1999	JEFFREY A. MORGAN	10981028-1	7874
75	90 04/19/2004		EXAM	INER
IP ADMINISTRATION			GROSS, KENNETH A	
LEGAL DEPARTMENT 20BN HEWLETT PACKARD COMPANY			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
,	09/430,877	MORGAN, JEFFREY A.				
Office Action Summary	Examiner	Art Unit				
	Kenneth A Gross	2122				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 06 Fe	ebruary 2004.					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-12</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) $\square$ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)☐ All b)☐ Some * c)☐ None of:						
1.☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal Pa	atent Application (PTO-152)				
Paper No(s)/Mail Date	6)  Other:					

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#### **DETAILED ACTION**

- 1. This action is in response to the amendment filed on February  $6^{th}$ , 2004.
- 2. The rejection set forth in the office action mailed on November 5<sup>th</sup>, 2003 has been withdrawn. Claims 1-12 is now newly rejected below under 35 U.S.C. 103(a).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 4-7, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ussery et al. (U.S. Patent Number 6,075,935) in view of Nevarez et al. (U.S. Patent Number 6,189,103).

In regard to Claim 1, Ussery teaches: (a) providing class libraries for different applications and for forming different programs for the operation of an application-specific integrated circuit (Figure 2, item 58); (b) identifying a particular application to be run on the circuit device (Column 2, lines 61-65); and (c) compiling the program by selecting from the libraries, classes required to run the application in the device, wherein the program is specific to the application (Column 9, lines 20-37). Ussery teaches that the program can be used for connectivity purposes (Column 4, lines 44). Ussery does not teach that the program to be run on the device is a web server or a virtual machine. Nevarez, however, does teach a web server and virtual machine residing on a server device (Figure 2, items 202 and 224), which runs an application (Figure 2, item 204).

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Neither Ussery nor Nevarez teach that the web server is application specific. However, if the program in Ussery is the web server in Nevarez, then since the web server program in Ussery is application specific, it would be obvious to make the web server in Nevarez application specific. Neither Ussery nor Nevarez teach a web server class library or a virtual machine class library for forming different application specific web servers. However, if the libraries in Ussery are used for forming a program to be downloaded on application specific circuit, and Nevarez teaches web server and virtual machine programs run on a device, then it would be obvious to include libraries for forming application specific web server and virtual machine programs to be run on a device, since it is taught in Ussery, that the device can be used in connectivity (Column 4, lines 44). Furthermore, Ussery does teach that the libraries are specific to certain applications (Column 4, lines 25-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide class libraries for different applications and for forming different programs for the operation of an application-specific integrated circuit, identify a particular application to be run on the circuit device and compile the program by selecting from the libraries, classes required to run the application in the device, wherein the program is specific to the application, as taught by Ussery, where the program to be run on the device is a web server or a virtual machine, as taught by Nevarez, since this allows server functionality on the device while taking advantage of virtual machine benefits, further where the web server is application specific, as taught in the combination of Ussery and Nevarez, since this allows specific functionality for one application, and finally a web server class library or a virtual machine class library for forming different application specific web servers, as taught in the combination of Ussery

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and Nevarez, since this allows libraries to provide application specific code for different web server and virtual machine programs that run on the device.

In regard to Claim 4, Ussery teaches an electronic device (Figure 2, item 54) with a program embedded in the device (Figure 2, item 60). It would be obvious to embed any type of program in the device, and Nevarez teaches a web server program on a web server device, and so it would be obvious to embed a web server program on the device.

In regard to Claim 5, Nevarez teaches running web applications on the server device (Column 7, lines 60-63).

In regard to Claim 6, Claim 6 is a system step that contains limitations that correspond with method Claim 1, and these limitations are rejected for the same reasons as Claim 1, where Ussery teaches a system for said method of Claim 1 (Figure 2). Furthermore, Claim 6 teaches forming an application specific virtual machine that is specific to the web application. As said in Claim 1, since Ussery teaches forming an application specific program to be run on the device, and Nevarez teaches a virtual machine to be run on a device, then it would be obvious to form a virtual machine program to be run on the device.

Claim 7 is a system step and claim 11 is a structure step that corresponds with claim 4, and are both rejected for the same reasons as claim 4, where Ussery teaches a system and structure for carrying out said method of Claim 4 (Figure 2).

In regard to Claims 9 and 12, Claims 9 and 12 are system and structure steps that contain limitations that correspond with method Claim 5, and these limitations are rejected for the same reasons as Claim 5, where Ussery teaches a system for said method of Claim 5 (Figure 2).

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In regard to Claim 10, Claim 10 contains limitations that have already been addressed in the rejection of Claim 6, and Claim 10 is rejected for the same reasons as Claim 6.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ussery et al. (U.S. Patent Number 6,075,935) in view of Nevarez et al. (U.S. Patent Number 6,189,103) and further in view of Breslau et al. (U.S. Patent Number 5,761,512).

In regard to Claim 2, Ussery and Nevarez teach the method of Claim 1, but do not teach further receiving at a compiler the libraries and the web application, the compiler parsing the libraries to select the classes that correspond to the web application. Breslau, however, teaches parsing the library of classes (Figure 3, item 31) in order to select the class that corresponds to the application (Figure 3, items 53 and 59). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to perform the method of Claim 1, where the compiler receives the libraries and the web application, the compiler parsing the libraries to select the classes that correspond to the web application, as taught by Breslau, since this allows the compiler to automatically extract the correct classes without the user having to send the exact classes to the compiler.

6. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ussery et al. (U.S. Patent Number 6,075,935) in view of Nevarez et al. (U.S. Patent Number 6,189,103) and further in view of Madany (U.S. Patent Number 6,199,196).

In regard to Claim 3, Ussery and Nevarez teach the method of Claim 1, but do not teach the method of extracting from the class library the other classes required to run the identified class, and recursively extracting required classes. Madany, however, teaches a

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method of extracting a class for a component from a class file, and than recursively checking to see if there are any class dependencies for this extracted class, and adds these classes to the output file (Figure 6 – items 630-645, Figure 7, Column 8, lines 17-28). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to perform the method of Claim 1, where the method further includes extracting from a class file all the required classes for the web server as taught by Madany, because this is a fast way to include all the required classes and without all the required classes, the program would not run.

Claim 8 is a system Claim that corresponds with the method Claim 3, and Claim 8 is rejected for the same reasons as Claim 3, where Ussery teaches a system for carrying out said method of Claim 3 (Figure 2).

### Response to Arguments

- 7. Applicant's arguments with respect to claims 1-12 have been considered but are most in view of the new ground(s) of rejection.
- 8. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

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### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542. The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ANTONY NGUYEN-BA PRIMARY EXAMINE

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